

REMARKS

The present Amendment amends cancels claims 1-7 and 12 and adds new claims 20-30. Therefore, the present application has pending claims 20-30.

Claims 1 and 2 stand rejected under 35 USC §102(a) as being anticipated by Qiong (article entitled "Active Query Caching for Database Web Servers"); claim 3 stands rejected under 35 USC §103(a) as being unpatentable over Qiong in view of Barish (article entitled "World Wide Web Caching: Trends and Techniques"); and claims 4-7 and 12 stand rejected under 35 USC §103(a) as being unpatentable over Qiong in view of Barish in view of Landsman (U.S. Patent No. 6,314,451) and further in view of an alleged Official Notice. As indicated above, claims 1-7 and 12 were canceled. Therefore, these rejections are rendered moot. Accordingly, reconsideration and withdrawal of these rejections is respectfully requested.

It should be noted that the cancellation of claims 1-7 and 12 was not intended nor should it be considered as an agreement on Applicants part that the features recited in claims 1-7 and 12 are taught or suggested by any of the references of record. The cancellation of claims 1-7 and 12 was simply intended to expedite prosecution of the present application.

As indicated above, new claims 20-30 were added directed to a data processing method and data processing relay apparatus not taught or suggested by any of the references of record whether taken individually or in combination with each other. The service system according to the present invention includes a client, a server, and a data processing relay apparatus (relay apparatus). In response to the data request from the client, the server

sends an extended data to the relay apparatus. The extended data includes requested data and data processing control information including at least one data processing instruction for processing the data.

When the relay apparatus receives the extended data, the data processing unit of the relay apparatus extracts the data processing instructions one by one from the data processing control information, executes the process in accordance with the data processing instruction to obtain the response data and repeats to complete the above-mentioned process until all data processing instructions are processed. The response data is returned to the client.

The present invention is characterized that the relay apparatus includes the data processing unit (processing program). As mentioned above, the data processing unit extracts the data processing instructions sequentially from the data processing control information which includes at least one data processing instruction. The data processing instruction is a kind of control data necessary for controlling data. The server can control and change the data processing performed in the relay apparatus by changing the content of the data processing instruction i.e., the control data. If the data structure used for the data processing instruction is made open to the third part, the third part can make new data processing instructions. By sending from the server to relay apparatus the data and the newly made data processing instruction together, it is possible to perform any arbitrary processing on the relay apparatus.

Qiong Luo shows the applet. The applet is a program. In Qiong Luo, the server sends data and the applet to the relay apparatus. Assume the

server makes the relay apparatus execute any processing on the data and the server would like to change the processing executed by the relay apparatus. In this case, the applet or the program for processing the data should be changed. The applet programmer should know the operating system (OS) of the relay apparatus and should program the applet, which are heavy loads.

In the present invention, such process change can be accomplished by changing the control data, i.e., the data processing instructions. Therefore, the present invention is different from Qiong Luo and the other references of record in the above-mentioned data processing scheme.

In view of the foregoing amendments and remarks, applicants submit that claims 20-30 are in condition for allowance. Accordingly, early allowance of claims 20-30 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.40508X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120